



STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF
STATE PLANNING COORDINATION

July 21, 2004

Ms. Julie Kirkpatrick
Morris & Ritchie Associates, Inc.
18 Boulden Circle, Ste. 36
Wilmington, DE 19720

RE: PLUS review – PLUS 2004-06-10; Johnson Farm

Dear Ms. Kirkpatrick:

Thank you for meeting with State agency planners on June 30, 2004 to discuss the proposed plans for the Johnson Farm project to be located along Moorton road near Johnson Farm Lane.

According to the information received, you are seeking site plan approval for 397 single family residential units on 197.6 acres.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as Kent County is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the County.

This office has received the following comments from State agencies:

Office of State Planning Coordination – Contact: David Edgell 739-3090

This project is located in Investment Levels 2 and 3 according to the June 3 version of the 2004 State Strategies for Policies and Spending, which has been approved by the Cabinet Committee for State Planning Issues. This site is also located in the Kent County Growth Zone. Investment Level 2 reflects areas where growth is anticipated by local, county, and

State plans in the near term future. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. Our office has no objections to the proposed development of this project in accordance with the County codes and ordinances.

State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685

The existing house (identified in our office as K1376) will remain with the development designed around it. The developers plan to perform a feasibility study to understand the building's condition and discover if it is something they can preserve. If they can preserve the house, their next plan would be to find a use for the building within the development. Associated with this house are remains of a silo and barn, which will be demolished. We request that the developers or their representatives contact Anne McCleave at 302-739-5685 so that she and the Kent County preservation planner can visit the site and document the house and the outbuildings before any construction occurs. Ms. McCleave would also be happy to assist during the rehabilitation of the building if it is preserved.

There are archaeological sites within the area. We suggest the applicant contact the SHPO office to schedule a time their archaeologists can visit the site and advise the developers how best to design the development so it does not harm any of the sites.

Department of Transportation – Contact: Bill Brockenbrough 760-2109

DelDOT received a traffic impact study for this project on April 28, 2004. They expect to comment to Kent County regarding it in December or January.

DelDOT recognizes the inclusion of stub streets to the adjacent parcels on the east and west as being desirable. The developer is commended for providing them.

The plan shows a 60-foot right-of-way width for the stub street to the adjacent parcel on the east but only a 50-foot right-of-way width from there to the closest site entrance. Both right-of-way widths must be 60 feet.

There are two parcels along Moorton Road that are not part of this subdivision. The plan should be modified to provide for future access to these parcels from the subdivision streets.

Moorton Road is classified as a local road. DelDOT's policy is to require dedication of sufficient land to provide a minimum right-of-way width of 30 feet from the centerline on local roads. While the plan does not indicate what the existing right-of-way width is for Moorton Road, we believe that it is only 30 feet total. If that is correct, we will require right-of-way dedication to provide the additional 15 feet from this project. The plan presented shows only 5 feet.

One of the improvements that DelDOT anticipates identifying in their review of the TIS is the improvement of Moorton Road, between Brenford Road (Kent Road 42) and Lynnbury Woods Road (Kent Road 152) to more closely meet DelDOT's local road standards. The minimum typical section for those improvements would be two 11-foot lanes, two 4-foot shoulders and a 15-foot wide permanent easement adjacent to the new right-of-way line identified in item 5 above.

In addition to the improvements mentioned above, improvements will be needed at the site entrances, consisting of by-pass lanes, or perhaps left-turn lanes, and right-turn lanes.

DelDOT supports the comments from the Department of Natural Resources and Environmental Control that sidewalks should be provided throughout the community and that cul-de-sacs should be removed from steep slopes.

The applicant's engineer should coordinate with the DelDOT Subdivision Manager for Kent County, Mr. George Shaw, regarding their requirements with regard to the design of the streets and the site entrances. Mr. Shaw may be reached at (302) 760-2261.

**The Department of Natural Resources and Environmental Control – Contact:
Kevin Coyle 739-3091**

Soils

According to the Kent County soil survey, the following soils were found in the immediate vicinity of the proposed construction and grouped on the basis of drainage class:

- Well Drained – Sassafras & Rumford
- Moderately well drained – Woodstown
- Poorly drained (**hydric**) – Fallsington & Elkton
- Very poorly drained (**hydric**) - Johnston (floodplain)

Sassafras is a well-drained upland soil with few limitations for development. Woodstown is a moderately well-drained soil of low-lying upland that has moderate limitations for development. Fallsington and Elkton are poorly-drained wetland associated (hydric) soils that have severe limitations for development. Johnston is a very poorly-drained wetland associated (hydric) floodplain soil that has severe limitations for development.

Wetlands

The proposed development is bordered on the west by Willis Branch. State wetland maps (SWMP) indicate the presence of Palustrine wetlands bordering this stream and within the forest block on the southeastern portion of the property.

A wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.

Impacts to wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Streets and lots should be laid out so as to not cross or intersect wetland areas or forested areas. Site plans show that a 25' buffer has been employed from wetlands; DNREC recommends that vegetated buffers of no less than 100' be employed around wetlands and waterbodies. To minimize potential homeowner activities within wetlands, no lot lines should contain wetlands, their buffers or other resources of conservation concern. All wetlands on site should be placed into a permanent conservation easement or other binding mechanism.

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether the farmed wetlands on subject parcel meet the recognized criteria for classification as "prior converted wetlands." Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous "fallow period" of five years or greater in that parcel's cropping history. Parcels converted after said date regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel's cropping history is Sally Griffin at the USDA – she can be reached at 678-4182

It should also be noted that this parcel contains sensitive headwater riparian wetlands associated with a headwater stream known as the Willis Branch. Headwater streams are important for the protection of water quality and the maintenance/integrity of the ecological functions throughout the length of the stream, including the floodplain system downstream. Since headwater streams are a major avenue for nutrient-laden stormwater and sediment runoff, their protection deserves the highest priority.

In recognition of this concern, the Department strongly recommends that the applicant preserve the existing natural forested buffer adjacent to the Willis Branch in its entirety. Efforts to maximize or expand the existing natural forested buffer width via planting of native woody or herbaceous vegetation, is strongly recommended.

Finally, the Department further recommends that the applicant minimize the clearing/removal of trees in the upland forested areas of this parcel. Upland forested areas are important for mitigating the impacts of stormwater runoff on water quality as well as preservation of habitat for a variety of wildlife species.

TMDLs

Although Total Maximum Daily Loads (TMDLs) as a “pollution runoff mitigation strategy” to reduce nutrient loading have not yet been developed for most of the tributaries or subwatersheds of the Delaware Bay watershed to date, work is continuing on their development. TMDLs for the Leipsic River subwatershed, of which this parcel is part, are scheduled for completion in December 2006.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATs) and/or best management practices (BMPs) as “methodological mitigative strategies” to reduce degradative impacts associated with development.

Water Supply

The project information sheets state that water will be provided to the project by a central public water system. Our records indicate that the project is located within the public water service area granted to Tidewater Utilities under Certificate of Public Convenience and Necessity PSC-1464. Any public water utility providing water to the site must obtain a certificate of public convenience and necessity (CPCN) from the Public Service Commission. Information on CPCNs and the application process can be obtained by contacting the Public Service Commission at 302-739-4247. Should an on-site public well be needed, it must be located at least 150 ft. from the outermost boundaries of the project. The Division of Water Resources will consider applications for the construction of on-site wells provided the wells can be constructed and located in compliance with all requirements of the Regulations Governing the Construction and Use of Wells. A well construction permit must be obtained prior to constructing any wells.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-3665.

Stormwater Management

Source: Delaware Sediment and Stormwater Regulations

Requirements:

1. Land disturbing activities in excess of 5,000 square feet are regulated under the Delaware Sediment and Stormwater Regulations. A detailed sediment and stormwater management plan must be reviewed and approved by our office prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.) taking place.
2. The review fee and a completed Application for a Detailed Plan are due at the time of plan submittal to our office. Construction inspection fees based on developed area and stormwater facility maintenance inspection fees based on the number of stormwater facilities are due prior to the start of construction. Please refer to the fee schedule for those amounts.
3. The following notes must appear on the record plan:
 - The Kent Conservation District reserves the right to enter private property for purposes of periodic site inspection.
 - The Kent Conservation District reserves the right to add, modify, or delete any erosion or sediment control measure, as it deems necessary.
 - A clear statement of defined maintenance responsibility for stormwater management facilities must be provided on the Record Plan.
4. Ease of maintenance must be considered as a site design component and a maintenance set aside area for disposal of sediments removed from the basins during the course of regular maintenance must be shown on the Record Plan for the subdivision.
5. All drainage ways and storm drains must be contained within drainage easements and clearly shown on the plan to be recorded by Kent County.
6. A soils investigation supporting the stormwater management facility design is required to determine impacts of the seasonal high groundwater level and soils for any basin design.
7. Access to the proposed stormwater facility must be provided for periodic maintenance. This access should be at least 12 feet wide to leading to the facility and around the facility's perimeter.

Comments:

1. The lots shown along the steep slopes along Willis Branch should be pulled back to avoid disturbance in those areas. Several of the proposed stormwater management areas are also shown along the Willis Branch slopes. Care should be taken in the design of those stormwater facilities to avoid an embankment situation falling under the requirements of small pond code 378.
2. The preferred methods of stormwater management are those practices that maximize the use of the natural features of a site, promote recharge and minimize the reliance on structural components. The designer is encouraged to consider the conservation design approach and limit the amount of tree clearing required for the development of the site including the stormwater management facilities shown in the wooded areas.
3. It is recommended that the stormwater management areas be incorporated into the overall landscape plan to enhance water quality and to make the stormwater facility an attractive community amenity.
4. A letter of no objection to recordation will be provided once the detailed Sediment and Stormwater Management plan has been approved.
5. Proper drainage of developed lots and active open space should be considered in the development of the grading plan for this subdivision.
6. Based on the site characteristics, a pre-application meeting is suggested to discuss stormwater management and drainage for this site.

Drainage

The Drainage Section requests that any area designated as a drainage/utility easement be left as open space and not owned by the individual landowners. Structures, decks, buildings, sheds, kennels, fences or trees should not be placed within the drainage easement to allow for maintenance. The Drainage Section further requests that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water.

Habitat

A review of our database indicates that the following species and/or communities at or adjacent to the project site:

Scientific Name	Common Name	Taxon	State Rank	State Status	Global Rank	Federal Status
<i>Dryopteris celsa</i>	Log Wood Fern	Plant	S1		G4	
<i>Trillium cernuum</i>	Nodding Trillium	Plant	S2		G5	
<i>Mitella diphylla</i>	Two-leaf Bishop's Cap	Plant	S2		G5	
<i>Fraxinus nigra</i>	Black Ash	Plant	S2		G5	

State Rank: S1 - extremely rare within the state (typically 5 or fewer occurrences); S2 - very rare within the state (6 to 20 occurrences); B - Breeding; N - Nonbreeding; **State Status:** E - endangered, i.e. designated by the Delaware Division of Fish and Wildlife as seriously threatened with extinction in the state; **Global Rank:** G1 - imperiled globally because of extreme rarity (5 or fewer occurrences worldwide); G2 - imperiled globally because of great rarity (6 to 20 occurrences); G3 - either very rare and local throughout its range (21 to 100 occurrences) or found only locally in a restricted range; G4 - apparently secure globally but uncommon in parts of its range; G5 - secure on a global basis but may be uncommon locally; T_ - variety or subspecies rank; Q - questionable taxonomy; **Federal Status:** LE - endangered, i.e. designated by the U.S. Fish and Wildlife Service as being in danger of extinction throughout its range; LT - threatened, i.e. designated by USFWS as being likely to become endangered in the foreseeable future throughout all or a significant portion of its range; PS - proposed status.

These state rare plant species are located adjacent to the project site within Lynnbury Woods along Willis Branch. We recommend maintaining the forested buffer along Willis Branch (at least 100ft) and increasing wetland buffers in the project plan from 25ft to 100ft. Buffers are an integral component of aquatic and wetland habitats, reducing the amount of sediments, pollutants, and other non-point source material that may affect the function and integrity of habitat and the condition and survivability of aquatic organisms. Forested buffers also serve as habitat for many terrestrial species that are dependent on aquatic and wetlands habitats for a portion of their annual life cycle.

We request that no invasive species be used in the revegetation of disturbed areas. A list of species considered invasive in Delaware can be found on the DNHP web site, <www.dnrec.state.de.us/fw/invasive.htm>. It is further recommended that you use native plants and the DNREC botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

Open Space

To maximize the existing buffering capacity and wildlife habitat on site, it is recommended that lot lines be pulled out of the forest and areas of community open space be designated along the riparian areas. Doing some will accomplish two things: it will preserve the existing riparian buffers on site and its value for birds and wildlife and it will create recreational opportunities for residents by allowing them access to and views of the forest and stream.

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

Recreation

The Division of Parks and Recreation conducted a telephone survey of Delaware residents to gather information on outdoor recreation patterns and preferences as well as other information on their landscape perception. These findings are the foundation of the 2003-2008 Statewide Comprehensive Outdoor Recreation Plan (SCORP) providing guidance for investments in needed outdoor recreation facilities. The high and moderate facility needs in Kent County are listed below. Consideration should be given to incorporate some of these recreation opportunities into the project.

High Priorities include walking or jogging paths, bike paths, swimming pools, picnic areas, playgrounds and fishing areas

Moderate priorities include skate facilities, hiking trails, baseball/softball fields, campgrounds, soccer fields, volleyball courts, basketball courts, and canoe/kayak access.

It is recommended that sidewalks be built fronting every residence and stub streets. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities 2) provide opportunities for neighbors to interact in the community and 3) facilitate safe, convenient off-road access to neighboring communities, public mass transit stops, schools, stores, work, etc.

Underground Storage Tanks

There are no LUST sites located near the proposed project. However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel in the contaminated areas.

State Fire Marshal's Office – Contact: Duane Fox 856-3696

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Where a water distribution system is proposed for single family dwellings it shall be capable of delivering at least 500 gpm for 1-hour duration, at 20-psi residual pressure. Fire hydrants with 1000 feet spacing on centers are required.
- The infrastructure for fire protection water shall be provided, including the size of water mains.

b. **Accessibility:**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Moortown Road must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.
- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
- If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.

c. **Gas Piping and System Information:**

- Provide type of fuel proposed, and show locations of bulk containers on plan.

d. **Required Notes:**

- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
- Name of Water Supplier
- Proposed Use
- National Fire Protection Association (NFPA) Construction Type
- Maximum Height of Buildings (including number of stories)
- Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: www.delawarestatefiremarshal.com, technical services link, plan review, applications or brochures.

Department of Agriculture - Contact: Mark Davis 739-4811

The Delaware Department of Agriculture does not oppose development on this site because it is within the Kent County growth zone and in a development district of the current Strategies for State Policies and Spending; however they believe the developer should redesign the entire project for esthetics, and function. In so doing the development will become more marketable and yield a greater return on investment dollars.

A forested buffer is required between the proposed subdivision and all adjacent properties in active agricultural use. In addition, a forest buffer should be maintained for those pre-existing residential properties and along all streams, wetlands, and river that border the proposed subdivision.

The developer should consider a diverse landscape plan that uses Delaware native tree and shrub species and encourages the "Right Tree for the Right Place" concept.

Precautions should be made to preserve some of the larger pre-existing trees during the construction process. Preservation of select trees will add value to the subdivision and improve the overall appearance. It is recommended that a certified arborist be utilized in species selection and for developing guidelines for tree care during construction.

Public Service Commission - Contact: David Bonar 739-4247

Recent legislation placed non-governmental companies providing wastewater services to 50 or more customers (in the aggregate) under the regulatory control of the PSC. While rules are not yet in place, the service provider will need to apply to become a regulated entity (if not already) as well as apply for a CPCN to provide sewer services.

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines.

Delaware State Housing Authority – Contact: Karen Horton 739-4263

The Delaware State Housing Authority supports this proposal because some of the units will be targeted to first-time homebuyers. The provision of these units will help address the need for affordable home ownership that was identified in the 2003 Statewide Housing Needs Assessment.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

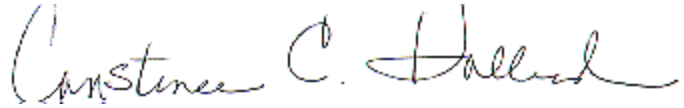
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Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in dark ink, reading "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being more prominent than the last name "Holland".

Constance C. Holland, AICP
Director

CC: Kent County Planning